Amendments to the Specification:

Please amend the paragraph beginning at page 8, line 2 from the bottom of the page, as follows:

In step (1), an alkaline waste solution produced from cyclohexane oxidation in a caprolactam preparation process is first neutralized and adjusted for its pH value with sulfuric acid to separate into an organic phase and an aqueous phase. The aqueous phase containing mainly sodium sulfate is delivered to a manufactory for recovering sodium sulfate. The organic phase contains valuable substances e.g. adipic acid, 6-hydroxycaproic acid, and other low molecular weight ester compounds such as incompletely saponified esters or ketones of cyclohexanol group, and C_4-C_6 lactones, etc. This is mainly purposed to completely convert 6-hydroxycaproic acid present at 10-20% in the organic phase into adipic acid, and to properly oxidize other low molecular weight esters into dicarboxylic acids. Consequently, content of dicarboxylic acids in the oxidized solution is greatly increased, thereby desirably enhancing the recovery efficiency. In order to recover more dicarboxylic acids for producing dicarboxylates, besides nitric acid, one or more additional oxidant can be utilized, such as hydrogen peroxide, perchloric acid and potassium permanganate, to oxidize and convert valuable substances of the organic phase at suitable temperature and pressure. Nitric acid used herein is generally at concentration of 10-90%, preferably 20-40%. In order to achieve full reaction, a ratio of nitric acid to the organic phase is 0.5-30:1 by weight, preferably 5-10:1. Other oxidants added in purpose of enhancing oxidation efficiency, are in a ratio of 0-5% relative to nitric acid by weight, preferably 0.01-1%. Reaction is performed in condition of at least one stage, preferably 2-5 stages, with variable reaction temperature and time in different stages. Reaction temperature is ranged between 10-150° C., preferably 30-120° C., and gradually increases from the first to the last reaction stage with an interval difference between 5-30° C., preferably 10-20° C. Reaction time in each reaction stage is usually from 5 minutes to four hours, preferably 10 minutes to two hours. Reaction pressure is absolute pressure of 0.5-2 kg/cm^2, preferably 0.8-1.2 kg/cm^2. NO(g) and NO_2(g) produced in the reaction are delivered to a nitric acid recycle system for recovery.